



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,965	03/31/2005	Oren Gavriely	120 05 01 NP US	7454
36131 7590 07/10/2009				
YORAM TSIVION				
P.O. BOX 1307				
PARDES HANNA, 37111				
ISRAEL				
EXAMINER				
SMITH, PHILIP ROBERT				
ART UNIT		PAPER NUMBER		
3739				
MAIL DATE		DELIVERY MODE		
07/10/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,965

Applicant(s)

GAVRIELI, OREN

Examiner

PHILIP R. SMITH

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112, Paragraph One

- [01] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [02] Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As set forth previously, it would require undue experimentation to determine (1) how to measure accumulation of secretion using an image sensor; and (2) how to determine the threshold of over-accumulation.

Claim Rejections - 35 USC § 102

- [03] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [04] The rejection of the claims as being anticipated by Moore set forth in the Office action of 1/22/09 are withdrawn in view of the amendments of 5/11/09.
- [05] Claims 12 & 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Hill (6,929,600).
- [06] With regard to claim 12: Hill discloses a method of continuously monitoring changes in indications of vital functions of a patient, employing a tube ("video scope 40") used to effectively convey fluids into and out of the body of said patient ("third channel (not shown) in the lumen of the shaft 50 which has an opening at the tip 48 of the stylet 42 and provides a suction or irrigation capability" 6/22),
- [06a] wherein at least one imaging sensor ("CCD or CMOS camera chip" 5/59) is incorporated in the anterior face of said tube, and wherein said sensor is coupled to a conduit ("image

channel 62" 5/48), continuously acquiring signals and transmitting said signals via said conduit;

[06b] said method comprises collecting said signals (images) transmitted via said conduit and interpreting said signals and/or displaying said signals, thereby performing said continuous monitoring of changes in indications of vital functions of said patient;

[06c] wherein said tube is placed within said body of said patient for a substantial period of time and wherein said continuous monitoring is performed during at least a substantial portion of said period, and wherein said fluids are selected from the group consisting of: gases and liquids, and conveyed to sustain a vital function of said patient, concomitantly with said monitoring ("suction or irrigation," as noted above).

[07] With regard to claim 15: As noted above, Hill discloses that said signals are images.

[08] With regard to claim 16: the tube disclosed by Hill is an endotracheal tube.

[09] With regard to claim 17: Hill discloses that said substantial period of time is a prolonged endotracheal intubation.

[10] With regard to claim 18: Hill discloses that said tube is placed inside the trachea of said patient.

Allowable Subject Matter

[11] Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

[12] Applicant's arguments filed 5/11/09 have been fully considered but they are not persuasive.

[13] Applicant contends that the specification enables:

...a detection of accumulation of secretions by performing the following steps: (1) – obtaining an image, (2) – processing the image, (3) comparing it to a reference base picture, and (4) setting on an alarm as soon as certain changes in the indication pass a predetermined threshold.

[13b] However, it is precisely the third and fourth steps that are not enabled.

[13c] Applicant asserts that “the cited portion of the specification was misinterpreted,” and suggests the following interpretation:

The inspection tube of the invention may also be used to detect changes in indications of vital functions of a patient. Accordingly, image and acoustic signal are being detected, processed and compared to a reference base picture or sound structure. An alarm is set as soon as certain changes in the indication pass a predetermined threshold. For example, the accumulation of secretions, or development of excessive or diminished lung noises are abnormal. Images as such may provide vital information regarding body or organ condition. Constant monitoring of images can be used to provide dynamic information regarding changes in blood flow, organ color or secretions level.

[13d] However, the specification offers no support for this interpretation.

[14] With respect to Moore and Shibata, Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

[15] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

[16] A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- [17] Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP R. SMITH whose telephone number is (571)272-6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm.
- [18] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.
- [19] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip R Smith/

Examiner, Art Unit 3739

/John P Leubecker/
Primary Examiner, AU 3739